IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF ILLINOIS EASTERN DIVISION

UNITED STATES OF AMERICA,)	
D1 : (200)	
Plaintiff,)	
V.)	Case No: 09 CR 446
DAHVEED DEAN,)	Hon. Samuel Der-Yeghiayar
Defendant.)	

MOTION IN LIMINE TO EXCLUDE EXPERT TESTIMONY OF SPECIAL AGENT NIKKI SKOVRAN PURSUANT TO DAUBERT v. MERRILL DOW PHARMACEUTICALS, INC.

NOW COMES the Accused, DAHVEED DEAN, by and through his attorney, Anthony J. Sassan, respectfully moves this Court *in limine* pursuant to *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), to exclude the testimony of Special Agent Nikki Skovran at trial, and in support thereof, states as follows:

Background

- 1. In the instant case, the Accused is charged in a six-count indictment charging the commission of three bank robberies, each involving two counts of the indictment, one for robbery and one for use of a firearm during the commission of the robbery. Counts One and Two, charging defendants Dahveed Dean and Terrance Daniels, involve a bank robbery on August 2, 2005 in South Holland, Illinois; Counts Three and Four, charging Terrance Daniels and Albert Jones, involve a bank robbery on August 25, 2005 in Skokie, Illinois; Counts Five and Six, charging Dahveed Dean alone, involve a bank robbery on December 20, 2005 in Chicago, Illinois.
- 2. On February 10, 2012, the Government disclosed it intended to call Special Agent Nikki Skovran as an expert in the analysis of cell site data, and to offer opinions regarding the

location of various cell phones, one of which was designated as phone number 773-457-2683 and belonging to the Accused. (Exhibit 1, p. 2)

- 3. According to Ms. Skovran's report, the FBI provided her with information regarding two robberies, one of which occurred on August 2, 2005 allegedly involving the Accused. Call detail records (CDRs) with cell site information were obtained from Nextel for the Accused's phone. The FBI requested Ms. Skovran to produce an "analysis of the CDRs to determine the cell sites utilized by . . . 773-457-2683 [the Accused's phone] between 1am and 3pm on 8/02/2005. . ." (Exhibit 1, p. 2)
- 4. Ms. Skovran began her report by providing "Basic Principals Utilized in Record Analysis" regarding technology and cell sites and sectors. When discussing cell phone technology, she states "[T]he best signal generally comes from the tower that is CLOSEST to the phone, or in its direct LINE OF SITE." (emphasis in original) When discussing cell sites, she states "As a GENERAL RULE, most towers (depending on the environment) have a radius of approximately ONE or TWO MILES (greater or less distances are also common)." (emphasis in original) (Exhibit 1, p. 3)
- 5. Ms. Skovran then purportedly analyzed the CDRs and plotted the Accused's whereabouts at various times on software called Microsoft Map Point based on latitude and longitude. Notably, "[s]pecific cell site areas of coverage were approximated and drawn on Map Point where applicable." (Exhibit 1, p. 4)

Legal Standard

6. Federal Rule 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.
- 7. In addition to the requirements of Rule 702, the expert's testimony must be relevant and reliable. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 589 (1993). The district court acts as a "gatekeeper" to ensure the testimony satisfies the relevancy and reliability requirements before presenting it to the trier of fact. *United States v. Lupton*, 620 F.3d 790, 798 (7th Cir. 2010).
- 8. Under a *Daubert* analysis, the Court must determine if the testimony will provide scientific knowledge that will assist the trier of fact to understand or determine the fact at issue. *Daubert*, 509 U.S. at 592. "Valid scientific knowledge" is determined by analyzing 1) whether the theory or technique can as has been tested; 2) whether it has been subjected to some form of peer review or scrutiny within the scientific community; and 3) the reliability of the technique, including the potential rate of error and the general acceptance within the relevant scientific community. *Daubert*, 509 U.S. 593-594. Even if scientifically valid, the Court must determine whether the testimony will assist the trier of fact in understanding the evidence or determining a fact in issue; essentially it is a relevance inquiry. *United States v. Hall*, 93 F.3d 1337, 1342 (7th Cir. 1996).

Cell-Site Location Technology

9. Several district circuits have commented on how cell phone technology and cell site technology can be used to track a cell phone's location. In *In re the Matter of an Application*

of the United States for an Order Authorizing the Release of Historical Cell-Site Information, 809 F.Supp.2d 113, 115 (E.D.N.Y. 2011), the court stated "[C]ell phones work by communicating with cell-sites operated by cell phone service providers. Each cell-site operates a certain location and covers a certain range of distance." (emphasis added)

10. In In re: Application of the United States for an Order for Prospective Cell Site Location Information on a Certain Cellular Telephone, 460 F.Supp 448, 452 (S.D.N.Y. 2006), the court recognized:

According to the government, "cell site information is an important investigatory tool which is used . . . to, among other things, help determine where to establish physical surveillance and to help locate kidnapping victims, fugitives, and targets of criminal investigations." Its usefulness for these purposes depends largely upon the number of antenna towers from which the government obtains information at a given time. Where the law enforcement agents obtain information from only one tower at a time, the can determine that a cell phone is in the cell served by that tower and, in some cases, which sector of the tower faces the cell phone; but they can neither pinpoint the precise location of the cell phone, nor track its movements. Where, however, the government obtains information from multiple towers simultaneously, it often can triangulate the caller's precise location and movements by comparing the strength, angle, and timing of the cell phone's signal measured from each of the sites.

11. When considering a motion to suppress, the court in *United States v. Madson*, slip opinion, 2012 WL 3095357 (July 2012), heard the following evidence:

The call-detail information, which is generated only when a cell phone is used, provides the date and time of a call, the number with whom the call occurred, the duration of the call, the direction of the call (whether the call was incoming or outgoing), and the codes for the cell sites and sectors involved in the call. Cell tower records identify the location corresponding to the codes of the cell towers and sectors appearing in the call detail information. Typical cell towers have three sectors, but the number can vary from one to several. Each sector services basically a cone extending from the tower out to the limits of the tower's service area. Once the Government obtains the call detail information and the cell tower records, the Government plots maps that show the general vicinities in which the cell phone was located during the periods when particular cell phone calls were made or received. These maps reflect that a call occurred within an area that covers several city blocks. *Pinpoint accuracy, or even near-pinpoint accuracy, is not possible with these particular records*." (emphasis added)

12. At least one district court relied on an article called Cell Tower Junk Science, 95 JUDICIATURE 151 (Jan. – Feb. 2012) when considering whether a cell phone ping placed a person at a particular location. *See, Storm v. City of Pasco*, (slip opinion), 2012 WL 3476446 (E.D. Washington August 15, 2012). The article states in pertinent part:

Investigators frequently use cell phone tower information in an attempt to place a suspect near a crime scene, and for years prosecutors have successfully convinced jurors that the data from a single cell phone tower can reliably specify a person's location at the time of a call. But in reality it takes GPS tracking or simultaneous ping information from at least three different locations to locate or track a caller and to determine his or her latitude and longitude. Prosecution experts acknowledge that the use of accounting department call detail records cannot precisely determine a caller's location, since the caller need not be immediately adjacent to the cell tower, but they suggest that the accounting data proves that the caller was within a mile — or five miles — ten miles of the tower. The problem is that their underlying claim is false even when it is combined with the following information:

- Cell tower latitude and longitude and street address;
- Telephone company drive test maps that validate cell phone reception within the intended coverage areas;
- Maps showing radio frequency (RF) for each cell tower;
- PowerPoint representation of defendant's travels based on serial multiple tower tracking; and
- Antenna information.

... No one who understands the relevant science would ever claim that data from a single cell phone tower is adequate.

Cell Tower Junk Science, 95 JUDICIATURE 151 (Jan. – Feb. 2012) (emphasis added)

(Exhibit 2)

Analysis

13. In the case at bar, the Government seeks to introduce "expert" testimony that relies on the faulty, unscientific premise that data received from one cell tower site used in conjunction with CDRs can "place the phones in specific locations." (Exhibit 1, p. 4)

- 14. Clearly, based on the cases and the article cited above, use of a single cell tower site to determine a cell phone's location or to trace its movement is not a scientifically valid method under *Daubert*.
- 15. Ms. Skovran's methodology, although tested, has met with negative scrutiny from the scientific community. The reliability of using CDRs and information from one cell tower (as opposed to multiple towers triangulating the location of the phone) has been deemed unreliable and is not generally accepted within the scientific community. In fact, the scientific community has specifically discounted this methodology as unreliable. This does not satisfy the requirements under *Daubert*.
- 16. Indeed, this evidence will simply lead jurors into believing that an invalid method of tracing a cell phone's location has some measure of credibility or validity because the information is coming from an "expert."
- 17. Furthermore, Ms. Skovran speaks in generalities that are not based in scientific principle. Specifically, Ms. Skovran states "[t]he best signal *generally* comes from the tower that is CLOSEST to the phone . . ." (Exhibit 1, p. 3) She further states "[a]s a <u>GENERAL</u> <u>RULE</u>, most towers (depending on the environment) have a radius of *approximately* ONE to TWO MILES (greater or less distances are also common)." (emphasis added) (Exhibit 1, p. 3)
- 18. The faulty scientific method espoused by Ms. Skovran will not help the jury understand the evidence or determine a fact in issue, namely, the Accused location at or near the time of the alleged robbery. (Federal Rule 702)
- 19. The faulty scientific method used by Ms. Skovran is not based on sufficient facts or data nor is it the product of reliable principles and methods. (Federal Rule 702)

Case: 1:09-cr-00446 Document #: 170 Filed: 08/31/12 Page 7 of 7 PageID #:977

20. Most significantly, Ms. Skovran could not have reliably applied the principles and methods to the facts of this case because the principles she relied upon were faulty at the start. (Federal Rule 702)

21. Because none of the factors required by Federal Rule 702 are met, Ms. Skovran's testimony is neither relevant nor reliable. *Hall*, 93 F.3d at 1342.

WHEREFORE, the Defendant, DAHVEED DEAN, moves this Court for an order barring the Government from presenting the expert testimony of Special Agent Nikki Skovran.

Respectfully Submitted,

/s/: Anthony J. Sassan

On behalf of the Accused, Terrance Scott

Anthony J. Sassan (#6216800) Zukowski, Rogers, Flood & McArdle 50 Virginia Street Crystal Lake, IL 60014 (815) 459-2050 asassan@zrfmlaw.com